Haruki HIRABAYASHI*: **Chromosome numbers in Japanese *Osmunda*****

平 林 春 樹*: 日本産ゼンマイ属の染色体数**

I have studied the chromosome numbers in the following five speies of *Osmunda* native in Japan.

§ Osmunda......*O. juponica* Thunb., *O. lancea* Thunb.

§ Osmundastrum...*O. cinnamomea* L. var. *fokiensi* Copel., *O. claytoniana* L.

§ Plenasium ....*O. banksiaefolia* Kuhn

The chromosome counts were made from the spore mother cell squashes. The sporangia were fixed overnight in acetic alcohol (1:3) and squashed in aceto-carmine. The gametic chromosome numbers observed given in the Tab. 1.

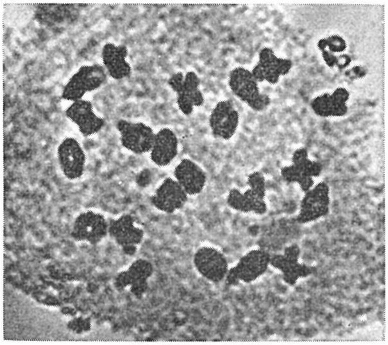

Fig. 1. *Osmunda lancea*. Bivalent chromosomes at meiotic metapase. (×1000).

Tab. 1.

Species	Chromosome number (n)	Locality
O. japonica	22 (fig. 2A)	Tokyo
O. lancea	22 (fig. 1)	Owase, Mie Pref.
O. cinnamomea		
var. *fokiensis*	22 (fig. 2B)	Karuizawa, Nagano Pref.
O. claytoniana	22 (fig. 2C)	Karuizawa, Nagano Pref.
O. banksiaefolia	22 (fig. 2D)	Osumi, Kagoshima Pref.
〃	22	Yakushima, Kagoshima Pref.
〃	22	Ashizurizaki, Kochi Pref.

The number n=22 exactly agrees with Manton's number (1950) which was counted in the following species: *O. regalis* L., *O. cinnamomea* L., *O. clayton-*

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** This work was supported by a grant from the Ministry of Education. (奨励研究)

iana L., *O. gracilis* Hort., *O. palustris* Hort. and *O. javanica* Bl. I did not find any polyploid species during my study.

I wish to express my cordial thanks to Prof. H. Ito of Tokyo University of Education, for his guidance and for his kindness in giving me the materials.

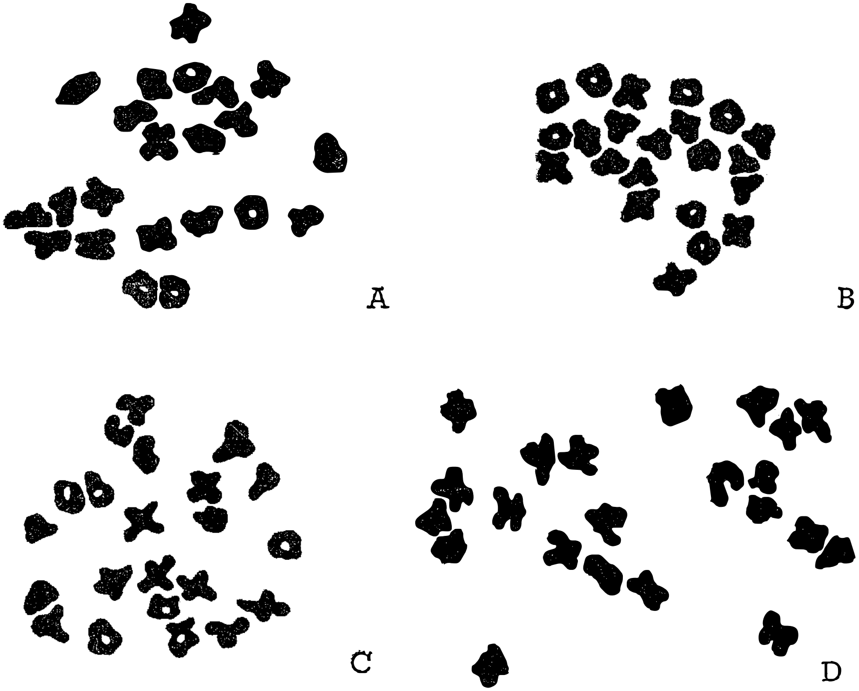

Fig. 2. Bivalent chromosomes at meiotic metaphase. A. *O. japonica*. B. *O. cinnamomea* var. *fokiensis*. C. *O. claytoniana*. D. *O. banksiaefolia*. (×1000).

文　献

Manton, I. 1950. Problem of cytology and evolution in the Pteridophta. Cambridge Univ. Press.

摘　要

日本産ゼンマイ属5種すなわち，ゼンマイ・ヤシャゼンマイ（以上ゼンマイ亜属），ヤマドリゼンマイ・オニゼンマイ（以上ヤマドリゼンマイ亜属），シロヤマゼンマイ（シロヤマゼンマイ亜属）について染色体数を調べた。すべての場合 n=22 であった。これはこの属の他の種類で調べた Manton (1950) の結果とよく一致する。